

U.S. Patent Application No. 10/650,124  
Amendment dated August 2, 2007  
Reply to Office Action of February 9, 2007

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### REMARKS/ARGUMENTS

Reconsideration and continued examination of the above-identified application are respectfully requested. Claims 1 - 5 and 7 - 68 are pending in the application. Claim 6 has been canceled. Claims 2 and 26-68 are presently withdrawn from consideration. No new claims have been added.

Claims 3, 8, 9, 11-17, and 19-25 have been editorially amended for sake of clarity. Paragraph [0055] and elsewhere in the specification provide a corresponding description for amended claims 3, 8 and 11. The dependencies of claims 9 and 12 have been adjusted to a respective intervening claim, and "selected from" language is added to clarify a method step. Claims 13-16 have "selected to be" language added to clarify a method step. Paragraphs [0025], [0044], and [0059] and elsewhere in the specification provide a corresponding description for amended claim 17. A typo has been corrected in claim 19. Paragraphs [0046] and [0066] and elsewhere in the specification provide a corresponding description for amended claim 20. Paragraph [0047] and elsewhere in the specification provide a corresponding description for amended claim 21. Paragraphs [0041], last sentence, and [0051], and elsewhere in the specification provide a corresponding description for amended claim 22. Paragraph [0050] and elsewhere in the specification provide a corresponding description for amended claim 23. Paragraphs [0033] and [0034] and elsewhere in the specification provide a corresponding description for amended claims 24 and 25. No new matter is introduced.

### Restriction Requirement

At page 2 of the Office Action, restriction was made between allegedly different inventions of Group I, claims 1 and 3-25, drawn to a method of doing business, classified in class 436, subclass

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56; Group II, claims 2 and 27, drawn to a method of representing characteristics, classified in class 705; Group III, claims 26 and 28-48, drawn to a method of representing characteristics, classified in class 434; Group IV, claims 49-65, drawn to a method of particle manufacture, classified in class 524; and Group V, claims 66-68, drawn to a method of distinguishing between two different grades, classified in class 35.

The applicants affirm the election, but respectfully traverse the restriction requirement.

According to Office Action, the inventions of Groups I and II-V are unrelated because Group I is related to a method of creating a tagging material that has a different mode of operation and effect not contemplated by the other inventions.

Applicants respond that none of claims 1 and 3-25 recite creating a "tagging material," and instead they recite creating a product specification comprising specifying at least one interfacial potential property value for a batch, lot, or shipment of particulate material. Therefore, this proposed basis of this restriction requirement is not tenable, and the claims of inventions II-V should be rejoined with those of Group I for examination at this time.

According to the Office Action, inventions II and III-V are unrelated because the invention of Group II is directed to a business method that has a different design, modes of operation, and effects not contemplated by the other inventions.

Applicants disagree as all of these groups recite an overlapping or similar feature related to associating at least one interfacial potential property value with a batch, lot, shipment, grade, brand, or type of particulate material. No serious burden would be imposed on the Patent Office to examine these groups together.

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According to the Office Action, inventions III and IV-V are unrelated because the invention of Group III is directed to a method of representing information that has a different design, modes of operation, and effects not contemplated by the other inventions.

Applicants disagree as all of these groups recite an overlapping or similar feature related to associating at least one interfacial potential property value with a batch, lot, shipment, grade, brand, or type of particulate material. No serious burden would be imposed on the Patent Office to examine these groups together.

According to the Office Action, inventions IV and V are unrelated because the invention of Group IV is directed to a method of particle manufacture that has a different design, modes of operation, and effects not contemplated by the other invention.

Applicants again disagree as both of these groups recite an overlapping or similar feature related to associating at least one interfacial potential property value with a batch, lot, shipment, grade, brand, or type of particulate material. No serious burden would be imposed on the Patent Office to examine these groups together.

In view of at least these reasons, reconsideration and withdrawal of the restriction requirement is requested. Accordingly, claims 2 and 26-68 should be rejoined with the remainder of the claims for examination at this time.

#### **Information Disclosure Statements**

At page 6 of the Office Action, the Examiner acknowledges receipt of the multiple Information Disclosure Statements, and cites *Penn Yan Boats, Inc. v. Sea Lark Boats, Inc.*, 359 F.

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Supp. 948, *aff'd* 479 F.2d 1338.<sup>1</sup> The Examiner indicates that these references have been considered in the same manner as references encountered during a normal search of Office search files.

In the Forms PTO-1449 attached to the present Office Action, the Examiner, in several sections, crossed-out various groups of documents and put in the handwritten notation "no copies provided." The applicants respectfully disagree. Copies of each of these references were provided to the U.S. Patent and Trademark Office at the time that the Information Disclosure Statements were filed. Copies of the date-stamped postcards from the U.S. Patent and Trademark Office acknowledging receipt of this information is attached and, clearly, each postcard shows that the number of documents set forth in each Form PTO-1449 was provided at that time. If the U.S. Patent and Trademark Office has lost these documents, the Examiner is requested to contact the undersigned to request additional copies, and since the Information Disclosure Statements were timely filed and evidence is attached to show the timely filing of these Information Disclosure Statements, along with the proper documents, the Examiner will need to proceed with considering these documents for purposes of completing the record. Reconsideration is respectfully requested.

**Rejection of claims 1 and 3-25 under 35 U.S.C. §112, second paragraph, for indefiniteness**

At pages 3-6 of the Office Action, claims 1 and 3-25 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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<sup>1</sup> Cf., *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1184, 33 USPQ2d 1823 (Fed. Cir. 1995); 37 C.F.R. §1.56 (a) requires, *inter alia*: 'Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.'

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This rejection is respectfully traversed.

For the reasons explained below, Applicants respectfully submit that claims 1, 3-5, and 7-25 define the subject matter which they regard as their invention with a reasonable degree of precision and particularity sufficient for purposes of complying with the requirements of 35 U.S.C. §112, second paragraph. Those skilled in the art can ascertain whether a particular embodiment would, or would not be, within the scope of any of claims 1, 3-5, and 7-25.

Regarding claim 1, the Examiner alleges that it is not clear what method is contemplated, and that it is not clear what is intended by "creating" and "a product specification."

In response, Applicants point out that breadth is not to be equated with indefiniteness. *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). Nor is a claim read in a vacuum; it must be read in light of the corresponding specification. According to M.P.E.P. §2173.04, if the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. §112, second paragraph. The scope of the subject matter of claim 1 is clear in view of the corresponding specification teachings (e.g., see paragraphs [0017] and [0053]-[0055]), and Applicants have not indicated an intended scope that is different from the wording of claim 1. The specification quite clearly teaches one of ordinary skill what is meant by "creating" "a product specification." The term "creating" is also known in the English language. Also, for example, in paragraph [0054] of the present specification, the following teaching is provided:

For purposes of the present invention, the product specification that is related to the interfacial potential property value can be a value specifically determined from a interfacial potential property test as described above, or can be a number or symbol or other denotation created to reflect, denote, or communicate a certain interfacial potential property in a product specification. It is within

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the scope of the present invention to assign at least one value of a property of a particulate material that is related to interfacial potential, or may be either derivable from or a component of the interfacial potential property value. Thus, for example, a property related to interfacial potential, such as wicking rate, may be specified. Alternatively, values obtainable from this property, such as the work of adhesion, the work of cohesion, or the difference between them, may be determined and specified. Since these values can be separated mathematically into components which relate to the interaction strength of the particulate filler with itself and with a matrix of probe fluid, the components may be used to specify a particulate material. Combinations of each of these are also possible. Therefore, as described above, "interfacial potential property value" would encompass the measurements of the property as well as derivations or components of any of these properties.

In view of at least the above, Applicants submit that claim 1 sets forth what applicants' regard as their invention with a reasonable degree of precision and particularity for compliance with 35 U.S.C. §112, second paragraph.

Regarding claim 3, the Examiner alleges the claim is confusing and that recording information about a product may not be statutory subject matter.

In response, the applicants submit that the method step of including information about a product on a product specification sheet, purchase order, invoice, contract, etc., such as recited in claim 3 is definite, which is the relevant question given the current statutory basis of this rejection of the claim (i.e., 35 U.S.C. §112, 2<sup>nd</sup> para.). Presently, this rejection has not been made under Section 101 of the Statute, and applicants disagree with any proposition, if made, that the claim defines subject matter that falls outside statutory subject matter in that respect. One skilled in the art can use this claimed discovery in a manner which provides some immediate utility to the public (e.g., see paragraph [0018] of the specification).

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Regarding claim 4, the Examiner alleges confusion regarding the term "specifying" and questions whether "determining" is a mental process.

In response, the applicants direct the Examiner's attention to paragraph [0054], for instance, and elsewhere in the specification, which explain that:

... the product specification that is related to the interfacial potential property value can be a value specifically determined from a interfacial potential property test as described above ... Thus, for example, a property related to interfacial potential, such as wicking rate, may be specified ... Therefore, as described above, "interfacial potential property value" would encompass the measurements of the property as well as derivations or components of any of these properties.

Clearly, the terms "specifying" and "determining" in claim 4 have understood meaning when properly read in light of the specification.

Regarding claim 5, the Examiner alleges the "determining" step of the recited method is confusing.

In response, the applicants note that claim 5 explicitly recites that the "determining" step involves "measuring" or "analyzing" particulate material. This language has definite meaning and scope to one of ordinary skill in the art. Paragraphs [0039]-[0052] and the examples provided in the present specification provide detailed descriptions regarding "determining" an interfacial potential property value by "measuring" or "analyzing" particulate material.

Regarding claims 6, 7, and 10, the Examiner alleges that it is confusing as to what is intended by the "specifying comprising characterizing ..." and "specifying," and questions whether these are mental steps.

In response, the applicants note that claim 6 is not currently at issue, and the "specifying" term recited in claims 7 and 10 concerning morphological or chemical values has definite meaning when properly read in light of the specification, such as in paragraphs [0033] - [0036], and reference

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is made thereto. The term "specifying," as recited in claims 7 and 10 clearly is not a mental step *per se*.

Regarding claim 9, the Examiner alleges it is confusing whether measurement steps are taking place and questions whether a method step is performed.

Regarding claim 12, the Examiner similarly questions whether any method steps are performed.

In response, the dependencies of claims 9 and 12 have been adjusted to a respective intervening claim and "selected from" language has been added to further clarify a recitation of a method step.

Regarding claims 13-16, the Examiner alleges that these claims do not appear to further limit claim 1 because no method steps are recited.

In response, "selected to be" language has been added to these claims to further clarify a recitation of a method step.

Regarding claims 17-19, the Examiner alleges it is confusing as to what method steps are performed by the claimed "absorptometry method," and refers to a typo in claim 19.

In response, the applicants point out that claim 17 has been editorially amended to clarify the general feature of the absorptometry method as described in the specification (e.g., [0044] and [0059]). Also, the typo in claim 19 has been corrected.

Regarding claim 20, the Examiner alleges that it is not clear what method steps are intended by the "wicking rate method."

In response, and even though the applicants disagree that original claim 20 was indefinite, especially when read in light of the specification, the applicants have amended this claim to recite additional details on this method such that the claim is even more definite in scope.



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Regarding claim 21, the Examiner alleges that is not clear what method steps are intended by the claimed "yield point method."

In response, and even though the applicants disagree that original claim 21 was indefinite, especially when read in light of the specification, the applicants have amended this claim to recite additional details on this method such that the claim is even more definite in scope.

Regarding claim 22, the Examiner alleges that is not clear what method steps are intended by the claimed "interfacial potential vapor adsorption method."

In response, and even though the applicants disagree that original claim 22 was indefinite, especially when read in light of the specification, the applicants have amended this claim to recite additional details on this method such that the claim is even more definite in scope.

Regarding claim 23, the Examiner alleges that is not clear what method steps are intended by the claimed "ICG method."

In response, and even though the applicants disagree that original claim 23 was indefinite, especially when read in light of the specification, the applicants have amended this claim to recite additional details on this method such that the claim is even more definite in scope.

Regarding claim 24, the Examiner alleges that is not clear what method steps are intended by the claimed "adsorption, vapor adsorption ... method."

In response, and even though the applicants disagree that original claim 24 was indefinite, especially when read in light of the specification, the applicants have amended this claim to recite additional details on this method such that the claim is even more definite in scope.

Regarding claim 25, the Examiner alleges that is not clear what method steps are intended by the claimed "adsorption method using iodine ...".

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In response, and even though the applicants disagree that original claim 25 was indefinite, especially when read in light of the specification, the applicants have amended this claim to recite additional details on this method such that the claim is even more definite in scope.

In view of at least the above, reconsideration and withdrawal of the indefiniteness rejection made against claims 1 and 3-25 is respectfully requested.

**Rejection of claims 1 and 3-25 under 35 U.S.C. §102(e) over Mansky, U.S. Patent Application Publication No. 2003/0097871**

At page 7 of the Office Action, claims 1 and 3-25 were rejected under 35 U.S.C. §102(e) as being anticipated by Mansky (U.S. Patent Appln. Publ. No. 2003/0097871). The Examiner alleged that, in light of the above-noted Section 112, second paragraph issues, the invention is best understood as a method of tagging with a particle that has identifiable characteristics. The Examiner references paragraph [0016] of Mansky for teaching use of a tag to identify a pellet. According to the Office Action, this alleged feature of Mansky reads on the claimed "method for creating a product specification ..." because the tag identifies the pellet and its characteristics/specifications. Also according to the Examiner, the limitations to the specific tagging materials have been considered but given little weight as they are not related to the claimed method.

This rejection is respectfully traversed.

As explained in the present specification, the present invention is directed to a method for creating a product specification for a batch, lot, or shipment of particulate material which involves specifying an interfacial potential property value for the batch, lot, or shipment of particulate material. The interfacial potential property value can be included on a product specification sheet for the brand or grade of particulate material. This present invention is useful

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in resolving a serious problem associated with particulate material production in which particulate materials that are seemingly made "within spec" with respect to one or more measures of morphology, such as particles size, surface area, structure, porosity, etc., nonetheless do not perform consistently as expected in customer applications. The method of the present invention involves the step of specifying at least one interfacial potential property value to the lot, batch, sample, and/or shipment of particulate material to help insure that customers receive particulate materials that not only are "within spec" relative to morphological properties and the like, but which also will perform consistently and reliably in applications. Oftentimes, a customer and/or a supplier will agree on specifications for a unit of product, which may be included in a contractual agreement, purchase order, invoice, contract, waiver to a contract, or combinations thereof. In various embodiments of the present invention, the product specification that includes at least one potential property value also can be included as part of such materials.

The applicants point out that Manksy is directed to a method for screening an array of materials for mechanical properties such as surface tension or interfacial tension. According to paragraph [0016] of Manksy, support beads or pellets are coated with a component(s) of interest, wherein the bead or pellet can be identified with a tag, such as an etched binary bar code used to indicate the history of the bead or pellet, i.e., to identify which components were deposited thereon.

Manksy therefore does not teach or suggest a method for creating a product specification for a batch, lot, or shipment of particulate material comprising specifying at least one interfacial potential property value for said batch, lot, or shipment of particulate material. Instead, Manksy etches a code on a bead or pellet, which indicates the history of components that have been deposited on the bead or pellet. Manksy's etched bead methodology does not address nor solve

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the problem of particulate materials that appear to be "within spec" but do not perform consistently in end-use applications. However, the present invention provides a solution to that problem.

Dependent claims 3-5 and 7-25 differ from Mansky for at least the same reasons as claim 1, and also recite features that represent additional differences between the present invention and Mansky.

Therefore, in view of at least the above differences that exist between the disclosure of Mansky and the present claims, it is apparent that Mansky fails to identically disclose any of present claims 1, 3-5 and 7-25. In the absence of an identical disclosure to the present claims, Mansky can not anticipate any of the present claims. Accordingly, this rejection should be withdrawn.

Further, the Office Action has not indicated that the present claims are obvious over Mansky, and, even if such an assertion is made, the above-identified significant differences between Mansky and the present claims would not have been suggested by Mansky alone or in combination with other art of record.


### CONCLUSION

In view of the foregoing remarks, the applicant respectfully requests the reconsideration of this application and the timely allowance of the pending claims.

If there are any fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 03-0060. If a fee is required for an extension of time under 37 C.F.R. §1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

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